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School-based interventions for reducing
disciplinary school exclusion. A Systematic Review
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TITLE OF THE REVIEW

School-based interventions for reducing disciplinary school exclusion: A Systematic Review

BACKGROUND

Discipline problems are frequent in schools and they may have harmful effects on pupils’ learning outcomes. A lack of discipline and the subsequent increase in school disorder can threaten the quality of instruction that teachers provide, hamper pupils’ acquisition of academic skills (e.g. resulting in low achievements or referrals for special educational provision) and reduce their attachment to the educational system (Sugai et al. 2000).

Schools use different procedures to manage school disorder, including disciplinary rules or punishments (e.g. being told off by teachers, loss of privileges, detention hours or parent meetings). Among punishments used in schools, exclusion is normally seen as one of the most serious consequences of misbehaviour. Although the types and lengths of school exclusion (also known as school suspension) vary from country to country, it can be broadly defined as a disciplinary sanction imposed in reaction to students’ behaviour (i.e. violations of school policies) by teachers, the headteacher, disciplinary boards or any other school authority that entails a removal from regular teaching for a period of time (Costenbader & Markson, 1998; Hemphill, Plenty, Herrenkohl, Toumbourou, & Catalano, 2014). Fixed-term exclusions consist of a limited number of hours/days during which students are not allowed to share classroom lessons or be present on the school premises (Cornell et al. 2011). Permanent exclusion involves the pupil being removed from a particular school and transferred to another school or educated outside of school (Spink, 2011; Webb & Vulliamy, 2004).

Predictors of school exclusion: who gets excluded?

Studies focusing on the prevalence of exclusionary sanctions show that they are not homogeneously distributed among school pupils. Exclusion is largely a male experience, disproportionately affecting adolescents from economically disadvantaged families as well as those from ethnic backgrounds (Yudof, 1975; Nickerson & Spears, 2007; Mcloughlin & Noltemeyer, 2010; Skiba et al. 2011). Other pieces of research have specified the role of Special Education Needs (SEN) in the production of exclusion. Research by Bowman-Perrott et al. (2013) specifically concluded that children identified with emotional/behavioral disorders and attention-deficit/hyperactivity disorders were more likely than children with learning disabilities to get suspended or expelled from school, when mutually compared.

Negative externalities linked to school exclusion

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1 In this document school exclusion and school suspension are used as synonyms.
Previous studies have consistently documented the negative externalities associated with these types of school sanctions (Hemphill, Toumbourou, Herrenkohl, McMorris, & Catalano, 2006; APA Zero Tolerance Task Force, 2008; Sharkey & Fenning, 2012; Chin, Dowdy, Jimerson & Rime, 2012). Most of the literature related to this field suggests that harsh punishments such as exclusion could result in a spiral into more student defiant behaviour. For instance, the use of disciplinary exclusion is linked with serious behavioural outcomes such as antisocial behaviour, delinquency and entry into the juvenile justice system.

Research by Hemphill et al. (2006:736) found that “school suspensions significantly increased the likelihood of antisocial behavior 12 months later, after holding constant established risk and protective factors (OR = 1.5; 95%CI 1.1-2.1; \( p < .05 \))”. In 2010, Hemphill & Hargreaves found that excluded students were 50% more likely to display antisocial behaviour and 70% more likely to engage in violent events. In terms of the involvement of school excludees in the legal system, Costenbader & Markson (1998: 67) found significant differences between excluded and never-excluded schoolchildren. Indeed, “while 6% of the students who had never been suspended reported having been arrested, on probation, or on parole, 32% of the externally suspended subsample and 14% of the internally suspended subsample responded positively to this question” (Ibid.).

Evidence suggests that periods of exclusion may have detrimental effects on pupils’ learning outcomes. Exclusion is accompanied by missed academic activities, alienation as well as demotivation (Brown, 2007; Michail, 2011a). In a retrospective longitudinal study of the association between exclusion and achievement from 4th-7th Grade, Arcia (2006) found that after three years, non-excluded students displayed substantially higher reading achievement scores when compared with those who had been excluded. In fact, 7th grade students who were excluded for 21 days or more got scores similar to fourth-grade students who had not been excluded.

In addition, students punished by exclusion seem to be at an increased risk for adverse outcomes later in life. For example, studies have shown that young people excluded from school are more likely to be “Not in Education, Employment, or Training” (NEET) in the future. In line with this idea, Brookes, Goodall, & Heady (2007) concluded that those students who had been excluded were 37% more likely to be unemployed during adulthood whereas Massey (2011) estimated that approximately one-in-two excluded children would be NEET within two years of their exclusion.

Whilst the aforementioned associations are stark, they should not be regarded as causal, as they may simply reflect underlying behavioural tendencies that lead to poor behaviour, exclusion and poor outcomes later in life (e.g. antisocial syndrome). In fact, school exclusion and the behaviours described here as “negative externalities” could be explained by the same underlying factors or personality traits (Farrington, 1997).

Criminological theories have been able to suggest a connection between punishment and the
reproduction of deviant behaviours. Labelling theory for example, suggests that punishment results in individuals being labelled (i.e. stigmatised), which affects self-image. Consequently, those punished by exclusion and labelled as “deviant” may start behaving in ways that conform with their newly formed self-image: for example being more limited in their interactions with more integrated students, and shunning opportunities and conventional social systems such as the school (Krohn, Lopes, & Ward, 2014:179). For its part, Sherman’s defiance theory (1993) elucidates the circumstances in which punishment can evolve into more antisocial behaviour or defiance.

In addition to the evidence regarding the adverse or counterintuitive effects of exclusionary punishments in schools, some research has been focused on examining their cost for society. Although the literature on this matter is limited, Brookes et al. (2007) produced a report regarding the costs of permanent exclusion in the United Kingdom. The analysis encompasses an estimation of costs for the individual as well as for the educational, health, social and criminal justice services. Overall the cost, in 2005 prices, of permanently excluding a student was estimated to amount to £63,851 per year to society.

The main goal of the present research is to systematically examine the available evidence for the effectiveness of different types of school-based interventions for reducing disciplinary school exclusion. Secondary goals relate to comparing different approaches (e.g. school-wide management, classroom management, restorative justice, cognitive-behavioural interventions) and identify those that demonstrate the largest and most significant effects when compared with control/comparison groups. We also aim to run analysis controlling for characteristics of: participants’ (e.g. age, ethnicity, level of risk); interventions (e.g. theoretical bases, components); implementation (e.g. facilitators’ training, doses, quality); and methodology (e.g. research design). Ultimately, this systematic review and meta-analysis intends to provide school teams and policy makers with evidence that can be useful for decision-making and programme implementation.

**OBJECTIVES**

- Do school-based programmes with a goal of reducing school exclusion reduce the use of exclusionary sanctions in primary and secondary schools?

- Are different school-based approaches more effective than others in reducing exclusionary sanctions?

- Do participants’ characteristics affect the impact of school-based programmes on exclusionary sanctions in primary and secondary schools?

- Do characteristics of the interventions, implementation, and methodology affect the impact of school-based programmes on exclusionary sanctions in primary and secondary schools?
EXISTING REVIEWS

In 2013/14 we conducted a systematic search of systematic reviews and meta-analyses on school-based programmes (Averdijk, Eisner, Luciano, Valdebenito, & Obsuth, 2014). The results suggested that there has been no previous meta-analysis aimed at assessing the effectiveness of interventions (i.e. different types of approaches) for reducing disciplinary school exclusion. Probably the most similar study is the one published by Burrell et al. (2003) who conducted a meta-analysis on the effectiveness of mediation programs in educational settings. Among many other outcomes, the analysis suggested that this type of interventions has a desirable effect ($r = -.287, K = 17, N = 5,706, p < .05$) on administrative suspensions, expulsions and disciplinary actions. However in this meta-analysis, the outcome of suspension was reported along with the aforementioned disciplinary actions; the study did not compare mediation with any other intervention (as proposed in the present meta-analysis), and also it calls for a cautious interpretation given the high heterogeneity of primary results [$X^2 = 77.22 (16, N = 5,706), p < .05$]. Furthermore, Solomon et al. (2012) conducted a meta-analysis exclusively testing the effectiveness of a singular intervention, namely, the School-Wide Positive Behavioral Interventions and Supports (SWPBIS) programme. Although a small number of included studies presented data on the impact of SWPBIS intervention on exclusion, the review does not report effect sizes for this outcome. Rather, the review reports effect sizes on the reduction of outcomes such as office discipline referrals, and problematic behaviours.

The proposed systematic review and meta-analysis therefore fill an important gap, providing a statistical assessment of the overall effect of school based interventions on school exclusion.

INTERVENTION

Broadly speaking, we plan to include any type of intervention in schools where the primary or secondary aim is the reduction of school exclusion as a punishment for inappropriate behaviour. Included interventions may be those targeting individual risk factors, school-related factors as well as those using a more comprehensive strategy including parents, teachers, school administrators and also the community.

Interventions targeting individual risk factors include, for instance, cognitive-behavioural approaches such as anger management programmes, skills training for children (e.g. Humphrey & Brooks, 2006) or restorative justice programmes (e.g. Shapiro et al. 2002; Cantrell et al. 2007). In general, these interventions target motivated children and train

* Peer mediation programmes focus on the development of non-violent conflict resolution skills training to facilitate the achievement of agreements. Peer mediators act as neutral third parties, assisting other students in the resolution of interpersonal conflicts through non-violent means (Burrell et al. 2003; Daunic et al. 2000).
them in practical skills to solve conflicts or negotiate them. Such interventions are normally organised in a curriculum and implemented in schools during school hours. The curriculum involves a package of group or one-to-one sessions using a wide range of techniques such as instruction, modelling, role-playing, feedback and reinforcement, among others (Gottfredson, Cook, & Na, 2012; Schindler & Yoshikawa, 2012).

At the school level, some interventions target teachers’ skills in classroom management (Pane et al. 2013). Essentially, the training for teachers encompasses instructional skills (i.e. guidelines for teaching rules, maintenance of attendance) and non-instructional skills (i.e. group management techniques, reinforcing positive conduct, techniques to explain expected behaviours) aimed at improving the learning process, preventing misbehaviour and encouraging positive participation by pupils (Averdijk et al., 2014).

More comprehensive prevention programmes address a variety of factors that influence pupils’ behaviour. Based on a multi-level approach, they target the students, families, teachers and school managers as well as the community (e.g. Bradshaw et al. 2012; Pritchard & Williams, 2001; Flay & Allred, 2003; Snyder et al. 2010). These types of programmes intend to provide support for positive behaviour by building proactive school-wide disciplinary procedures (i.e. improving the school climate and reducing problem behaviours) (Gottfredson et al. 2012; Maag, 2012).

For the present review, we will only include studies evaluating the effectiveness of interventions aimed at reducing school exclusion that involve a control condition. The control condition in this review may involve, for instance, a control group with no intervention (i.e. studies where the intervention group is compared with a group not receiving intervention at all), a control group with intervention as usual (i.e. studies where the intervention group is compared with those receiving the standard practice), a wait-list control group (i.e. studies where the intervention group is compared with a group of selected individuals who wait a period of time to receive the same intervention) or a placebo group (i.e. studies where the intervention group is compared with an intervention that is not expected to produce any change). The control groups could be selected by using random or non-random methods.

Excluded interventions will be those delivered in schools based in prisons or psychiatric units as well as interventions in colleges or universities.

**POPULATION**

Included reports will sample students from primary and secondary schools or equivalent levels for studies settled in countries other than the UK. We expect the bulk of studies to be targeting pupils about ages 10-15, where research suggests the largest number of exclusions (e.g. Liu, 2013; Raush & Skiba, 2004).
Although we will include primary and secondary schools, we will not apply any restrictions related to nationality, language or cultural background.

OUTCOMES

The primary outcome to be measured is school exclusion. As has been mentioned above, school exclusion is defined as an official disciplinary sanction imposed by an authority and consisting on the removal of a child from their normal schooling. This removal should happen as a reaction to students’ behaviour that violates the school rules or is illegal. School exclusion can last hours or days depending on the country and it can be implemented in school premises or out of it. In order to refine our searches we have been reviewing the terminology and characteristics of exclusion in different school systems and regions (e.g. Latin America, Europe, Australia & New Zealand).

We will include any studies on school-based interventions that have measured school-exclusion as an outcome, whether it is their primary outcome or not. We intend to code and analyse studies that involve outcomes for individuals in treatment and control/comparison groups whether randomly allocated to those groups or not.

For any identified study that reports findings on school exclusion as an outcome, we will also code effects of the intervention on behaviour domains (e.g., aggression, self-reported offending) as a secondary outcome. This way it will be possible to assess the extent to which reductions in problem behaviour are a mediator of treatment effects on school exclusion. Indeed, interventions may affect exclusion in two different ways. The first is by improving behaviours that led to a disciplinary measure. The second possibility is that behaviours stay the same but that the school develops an alternative strategy to deal with the disciplinary problems. If we accept that exclusions have negative consequences, then either effect would be desirable.

STUDY DESIGNS

We plan to identify and assess experimental (i.e. randomised controlled trials) and quasi-experimental studies (e.g., before-and-after designs with control or comparison group/groups, propensity score matched groups). With this focus, we aim to include only studies rated level 3 to 5 on the Maryland Scientific Methods Scale (Farrington, Gottfredson, Sherman, & Welsh, 2006).

Qualitative studies will be excluded from this systematic review and meta-analysis.
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**ROLES AND RESPONSIBILITIES**

**Content:** Professor Manuel Eisner has extensive experience conducting research on child prevention of antisocial behaviours. He is currently leading a large-scale longitudinal study conducted in Swiss schools, the Zurich Project on the Social Development of Children (z-proso). He has also conducted an important number of independent randomised controlled trials on school backgrounds. Dr Sutherland is currently working on projects relating to school exclusion and on underachievement in schools. The lead author, Professor Eisner and Dr Sutherland are involved in a large-scale cluster-randomised controlled trial, the London Education and Inclusion Project.
Systematic review methods: Professor David Farrington and Dr Maria Ttofi have been involved in previous large-scale projects for the Campbell Collaboration. They have produced an important number of meta-analyses in fields related to education and risk-focused prevention. PhD candidate Sara Valdebenito has recently conducted two systematic reviews related to school bullying. During 2015 she will be lecturing a course on meta-analysis for the Social Sciences Research Centre at the University of Cambridge.

Statistical analysis: Sara Valdebenito will conduct the statistical analysis, with Professor Farrington and Dr Ttofi acting as advisors during this process.

Information retrieval: The review team has conducted academic research for several years. All of them are familiar with experimental and quasi-experimental designs as well as databases where studies can be accessed. This project has been allocated resources for hiring assistance during the retrieval process. Sara Valdebenito will be in charge of the research assistant’s (i.e. MPhil or PhD student) training for the coding process. Dr Sutherland will provide advice on the coding of studies and the use of statistical software.

POTENTIAL CONFLICTS OF INTEREST

None of the researchers involved in the team present financial interest in this review. None of them have been involved in the development of interventions or systematic reviews on the scope of the present one. Three authors (Sara Valdebenito, Manuel Eisner and Alex Sutherland) are currently involved in the London Education and Inclusion Project cluster-randomised controlled trial (ISRCTN 23244695). The study is designed as an independent evaluation and the authors have no financial or other links to the evaluated programme.

FUNDING

Professor Manuel Eisner and Sara Valdebenito have been awarded a grant by the Nuffield Foundation for conducting the proposed systematic review. Terms and conditions agreed with the sponsor involve the submission of results during 2016.

PRELIMINARY TIMEFRAME

- Date you plan to submit a draft protocol: January 2015
- Date you plan to submit a draft review: February 2016
DECLARATION

Authors’ responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

Publication in the Campbell Library

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review and subsequent updates in the Campbell Library. Concurrent publication in other journals is encouraged. However, a Campbell systematic review should be published either before, or at the same time as, its publication in other journals. Authors should not publish Campbell reviews in journals before they are ready for publication in the Campbell Library. Authors should remember to include a statement mentioning the published Campbell review in any non-Campbell publications of the review.

I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

Form completed by: Sara Valdebenito Date: 10/09/2014


